Safety Data Sheet



Domestic and imported urea-formaldehyde (UF), scavenged urea-formaldehyde (ULEF) or phenol formaldehyde (PF)

Product ID# Date of issue: Sept-08-2015

(Prepared in accordance with OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 & GHS Rev 03)

SECTION 1: PRODUCT AND COMPANY INFORMATION

Trade Name: Europly Plus®, CFP 60"s® (on ULEF Composite), Melawood®

(on ULEF composite), Barkmulch

Product Description: Domestic and imported urea-formaldehyde (UF), scavenged urea-

formaldehyde (ULEF) or phenol formaldehyde (PF) bonded substrates with soy based decorative veneer lamination technology in unfinished or UV (clear, prime, pigment) coated hardwood industrial stock panels with veneer, particleboard or MDF cores, melamine on particleboard, engineered veneer, bark mulch, wood

chips

Synonyms: Hardwood plywood, prefinished plywood, melamine, Russian

birch, Baltic birch, bark dust, green wood chips, logs (with and

without bark.)

Company: Columbia Forest Products

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Greensboro, NC 27409

1-800-637-1609

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SECTION 2: HAZARD IDENTIFICATION

NOTE: This product may produce hazardous airborne levels of wood dust while being transported or handled by employees or downstream users creating potential hazards as described below:

Classification of the Substance Or Mixture

United States (US)

Classification according to OSHA 29 CFR 1910.1200 HCS

This product is generally an article but is regulated under OSHA for the release of wood dust during mechanical operations releasing dust. The free formaldehyde levels are below OSHA reporting requirements. The classifications below are based upon wood dust.

Skin Irritation Category 2

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Eye Irritation Category 2B

Respiratory Sensitization Category 1

Skin Sensitization Category 1 Carcinogen Category 1A

Specific Target Organ Toxicity Single Exposure Category 3: Respiratory Tract Irritation

Other Classifications:

Combustible Dust (OSHA Defined Hazard) If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air.

Label elements

Label according to OSHA HCS 2012

Hazard pictograms







GHS08

Signal word: Danger

Hazard statements: Causes skin irritation

Causes eye irritation

May cause allergy or asthma symptoms or breathing difficulties if

inhaled

May cause an allergic skin reaction

May cause cancer via inhalation of respirable dust

May cause respiratory irritation

May form combustible dust concentrations in air

Precautionary statements

Prevention: Take precautionary measures against static discharge.

Avoid breathing dust.

Take off contaminated clothing and wash before reuse. In case of inadequate ventilation wear an approved respirator

suitable for conditions of use.

Do not eat, drink or smoke when manufacturing or installing this

product.

Response: IF INHALED: If breathing is difficult, remove person to fresh air

and keep comfortable for breathing.



If experiencing respiratory symptoms, following removal to fresh

air, call a Doctor or other qualified medical professional. IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs get medical advice/attention.

If In Eyes: Rinse cautiously for several minutes. Remove contact

lenses if present and easy to do so.

If eye irritation persists, get medical advice. Store away from incompatible materials.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority

requirements.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures: This product may produce hazardous airborne levels of wood dust and formaldehyde gas while being handled by downstream users creating potential hazards as described below:

Component	CAS No.	Weight %	Hazard Classification According to Regulation
Wood Dust	Not listed RTECS #: ZC9850000	~ 98%	EU CLP: Self Classified: Skin Irrit 2; Eye Irrit 2; Skin Sens 1; Resp Sens 1; STOT SE 3 (Resp Irrit), Carc 1A OSHA HCS 2012: Skin Irrit 2; Eye Irrit 2; Skin Sens 1; Resp Sens 1; STOT SE 3 (Resp Irrit), Carc 1A
Formaldehyde	50-00-0	< 0.1% (emitted in small and diminishing quantities from Urea Formaldehyde resin glue)	EU CLP: Harmonised Classification: Acute Tox 3 (Oral, dermal and inhalation); Skin Corr 1B; Skin Sens 1; Carc1B; Muta 2 OSHA HCS 2012: Acute Tox 3 (Oral, dermal and inhalation); Skin Corr 1B; Skin Sens 1; Carc 2

SECTION 4: FIRST AID MEASURES

Eye Contact: In case of eye contact, immediately rinse eyes thoroughly with plenty of

water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists,

consult a physician.

Skin Contact: In case of skin contact, while wearing protective gloves, carefully remove

any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a

physician.



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Inhalation: Remove to fresh air. If any trouble breathing, get immediate medical

attention. Administer artificial respiration if breathing has ceased. If

irritation or symptoms occur or persist, consult a physician.

Ingestion: Not applicable under normal use.

Notes for the Doctor: Any treatment that might be required for overexposure should be directed

at the control of symptoms and the clinical conditions.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide (CO₂), water and sand.

Unsuitable Extinguishing Media: Heavy water (or jet) stream may cause dust to become

airborne and create a flash fire hazard or an explosive

atmosphere.

Firefighting Procedures: Follow established procedures for extinguishing wood

source fire.

Unusual Fire and Explosion

Hazard:

Hardwood plywood does not present an explosion hazard Sawing, sanding, or machining of hardwood plywood can produce wood dust as a by-product which may present an explosion hazard if a dust cloud contacts an ignition source.

An airborne concentration of 40 grams of wood dust per cubic meter of air is often used as the LEL for wood dust. OSHA interprets the explosive level as having no visibility

within 5 feet or less.

Hazardous Combustion: Burning of Hardwood plywood can result in carbon

Products: monoxide, carbon monoxide, hydrogen cyanide, aldehydes,

organic acids, and polynuclear aromatic compounds.

Further Information: Flash point: 600°F for wood.

Auto- ignition temp.: Varies (typically 400°F to 500°F

(204°-260°C)

Explosive limits in air: N/A for hardwood plywood. 40

g/m³ (LEL) for wood dust.

NFPA Rating (Scale 0-4): Health = 2 Fire = 1 Reactivity = 0



SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Evacuate personnel to safe areas. Remove all sources of

ignition. Take precautionary measures against static

discharges and against environmental release.

Personal Precautions and Protective Equipment:

Pick up, vacuum, or sweep spills for recovery and/or disposal. Avoid generation of dust during clean-up. Wear goggles or safety glasses when manufacturing or machining

any wood product. Wear NIOSH/MSHA approved respirator when the allowable limits may be exceeded. Other protective equipment, such as gloves and outer

garments may be needed, depending on dust conditions.

Environmental Precautions: Do not allow product to reach ground water, water courses,

sewage, or drainage systems during clean-up.

Methods and Materials for Containment and Clean-up:

All spills should be handled according to site requirements and based on precautions cited in the SDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood,

appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required. See Sections 9 and 10 for additional physical,

chemical, and hazard information.

Other Information: No further information is available.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: No special precautions for handling product. Use good

> safety and industrial hygiene practices. Avoid creating dusty conditions. Provide good ventilation where dust conditions cannot be avoided during cleanup. Place recovered wood dust in a container for proper disposal.

Conditions for Safe Storage: Store in well ventilated area as product will emit small

> amounts of formaldehyde. Keep away from sources of ignition as dried wood dust may pose a combustible dust

hazard.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Guideline:

Exposure Limits:

Component	CAS No.	Agency	Exposure Limits
Wood Dust (all soft and hard woods)	Not listed	OSHA	PEL-TWA 15 mg/m³ (total dust)
	RTECS #: ZC9850000	OSHA	PEL-TWA 5 mg/m³ (respirable dust)
		OSHA	PEL-TWA 5 mg/m³ (recommended softwood and hardwood; see footnote¹ below)
		OSHA	STEL 10 mg/ mg/m³ (recommended softwood and hardwood; ; see footnote below)
		ACGIH	TLV-TWA 1 mg/m³ (certain hardwoods);
		ACGIH	TLV-TWA 5 mg/m³ (softwood)
		ACGIH	TLV-STEL 10 mg/m ³
Formaldehyde	50-00-0	OSHA	TWA 0.75 ppm; STEL 2 ppm
		ACGIH	STEL 0.3 ppm
		HUD	0.3 ppm at .13 ft ² /ft ³

Engineering Controls:

Provide adequate ventilation and exhaust to keep airborne contaminant concentration levels below the OSHA PELs, and to reduce the possible buildup of formaldehyde gas, particularly when high temperatures and relative humidity

¹ In AFL-CIO v. OSHA 965 F. 2d 962 (11th Cir. 1992), the court overturned OSHA's 1989 Air Contaminants Rule, including the specific PELs for wood dust that OSHA had established at that time. The 1989 PELs were: TWA - 5 mg/m³; STEL (15 min.) - 10.0 mg/m³(all soft and hard woods except Western red cedar); Western red cedar TWA-2.5 mg/m³. Wood dust is now officially regulated as an organic dust under the Particulates Not Otherwise Regulated (PNOR) or Inert or Nuisance Dust categories at PELs noted under PART II of this MSDS. However, a number of states have incorporated provisions of the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OSH Act General Duty Clause under appropriate circumstances for non-compliance with the 1989 PELs.V1.2.

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occur. Avoid dusty conditions, and observe same

ventilation for wood dust as indicated for formaldehyde.

Eye/Face Protection: Wear goggles or safety glasses when manufacturing or

machining any wood product.

Skin Protection: Wear protective gloves such as rubberized cloth, canvas or

> leather gloves to minimize potential mechanical irritation from handling materials. Outer garments which cover the

arms may be desirable in extremely dusty areas.

Respiratory Protection: Wear NIOSH/MSHA approved dust respirator when the

allowable limits may be exceeded.

General Hygiene Considerations: Prevent/avoid creating/breathing dust. Wash after handling.

Do not eat, drink, or smoke while manufacturing or

installing this product.

Environmental Exposure Control: No data available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical Description: Unfinished and UV Finished multi-ply composite wood

> panels consisting of various combinations of hardwood or decorative veneer faces, bonded to other wood veneers, particleboard, medium density fiberboard, lumber, or hardboard. Generally used in cabinets, furnishings, laminated block flooring, and in other non-structural applications. Typically provided as 4' X 8' panels, but available in other sizes. Thicknesses range from under

5/32" to over 1".

Normal for natural wood. Light to dark in color. Color and Appearance/Odor:

odor vary by species and expired time since processing.

Safety Relevant Basic Data

Not applicable Not applicable Melting point/freezing point

Initial boiling point and boiling range Not applicable

Varies (typically 400°F to 500°F (204°-260° Auto- ignition temp.

N/A for hardwood plywood. 40 g/m³(LEL) Explosive limits in air:

for wood dust.



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Flash point 600°F for wood.

Evaporation rate Not applicable
Flammability (solid, gas) Not applicable
Upper/lower flammability or explosive limits
Vapour pressure Not applicable
Vapour density Not applicable
Relative density Not applicable

Specific gravity Usually less than 1, but varies depending on

wood species and moisture content.

Solubility(ies) Insoluble.

Partition coefficient: n-octanol/water Not applicable
Viscosity Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable at normal temperature and storages condition.

Conditions to avoid: High temperatures and high relative humidity increase the

rate of formaldehyde emissions. Avoid open flames or

other ignition source.

Incompatible materials: Oxidizing agents and drying oils.

Hazardous decomposition

products:

Thermal and/or thermal oxidative decomposition of

wood can produce irritating and toxic fumes and gases, including carbon monoxide, hydrogen cyanide, aldehydes,

organic acids, and polynuclear aromatic compounds.

Hazardous polymerization: Will not occur.

Sensitivity to static

May cause explosion in critical concentrations and conditions.

discharge:

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological data have not been determined specifically for this product. Individual component information is listed below.

The information below may not be consistent with the material classification in Section 2 because formaldehyde is presented below the threshold for labelling (0.1%).

Acute Effects:



Formaldehyde:

Carcinogenicity:

Oral LD₅₀: 100 mg/kg (rat) Dermal LD₅₀: > 270 mg/kg (rabbit) $>203 \text{ mg/m}^3 \text{ (rat)}$ Inhalation 4h LC₅₀:

Wood dust: No data available.

Gaseous formaldehyde may cause temporary irritation or a burning **Eye Irritation:**

sensation. Wood dust can cause mechanical irritation.

Skin Irritation: Depending on species, wood dust may cause dermatitis on

> prolonged, repetitive contact. Formaldehyde is corrosive and contact can severely irritate the burn the skin and eyes with

possible eye damage.

Wood dust and/or formaldehyde may cause nasal dryness and/or **Respiratory Irritation:**

> irritation. Coughing, sneezing, wheezing, sinusitis, prolonged colds, and headaches have also been reported. Both may aggravate pre-existing respiratory conditions or allergies. Wood dust may

also cause nasal obstruction.

Respiratory Sensitization: Formaldehyde and/or wood dust may cause respiratory

sensitization and/or irritation. Pre-existing respiratory disorders

may be aggravated by exposure.

Skin Sensitization: Both formaldehyde and wood dust from various species of wood

> may evoke allergic contact dermatitis in sensitized individuals Prolonged exposure to wood dust has been reported by some observers of European furniture workers to be associated with

nasal cancer. IARC classifies wood dust as a carcinogen to humans (Group 1). This classification is based primarily on IARC's

evaluation of increased risk in the occurrence of adenocarcinomas

of the nasal cavities and paranasal sinuses associated with

exposure to wood dust. IARC did not find sufficient evidence to

associate cancers of the oropharynx, lung, lymphatic, and

hematopoietic systems, stomach, colon, or rectum with exposure to wood dust. The National Toxicology Program (NTP) has also listed wood dust as a known human carcinogen. Wood dust is not listed as a carcinogen by ACGIH or OSHA. A large case control nasal cancer mortality study in North Carolina, Mississippi, Washington and Oregon (1962-1977) did not demonstrate an association between nasal cancer and occupations normally

associated with wood dust.

Formaldehyde is listed by IARC as a human carcinogen. NTP includes formaldehyde in the Annual Report on Carcinogens. Formaldehyde is regulated by OSHA as a potential cancer agent.

Some rats exposed under laboratory conditions to 14 ppm



formaldehyde (a level far exceeding human tolerance limits, and far exceeding that normally found in the workplace) for two years

developed a nasal cancer. The Universities Associated for Research and Education in Pathology (UAREP) has stated in a report, Epidemiology of a Chronic Occupational Exposure to Formaldehyde, (December, 1987) that: "1: For no malignancy in

man is there convincing evidence of a relationship with

formaldehyde exposure; and 2: Furthermore, that if a relationship does exist, the excess risk, in absolute terms, must be small."

Mutagenicity: No data available for wood dust. Formaldehyde is classified to

GHS Category 2 for mutagenicity endpoint based on induction of genotoxic and mutagenic effects on somatic cells at the site of

contact.

Reproductive Effects: No data available for wood dust. Formaldehyde is not classified to

GHS for reproductive toxicity.

Specific Target Organ

Toxicity Single Exposure:

May cause respiratory irritation.

Specific Target OrganMay cause damage to organs (respiratory system) through

Toxicity Repeated Exposure: prolonged exposure

Target Organs: Eyes, skin, respiratory system.

Routes of Exposure: Inhalation, dermal, eye.

Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The ecological assessment of this material is based on an evaluation of its components.

Ecotoxicity (Aquatic and Terrestrial): No data available for wood dust. Wood dust may

contain ingredients that are considered hazardous to aquatic organism. Formaldehyde is not considered

to be toxic to aquatic organisms.

Persistence/Degradability: Wood dust would be expected to be biodegradable.

Formaldehyde is expected to be readily biodegradable in the environment based on

experimental data.



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Bioaccumulation/Accumulation: No data available for wood dust. Formaldehyde has

a low potential for bioaccumulation.

Mobility in Soil:

Results of PBT and vPvB Assessment:

Other Adverse Effects:

No data available.

No data available.

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Disposal must be in accordance with applicable federal,

state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Disposal is

the responsibility of the generator.

Contaminated Packaging: Disposal must be in accordance with applicable federal,

state/provincial, and/or local regulations.

SECTION 14: TRANSPORT INFORMATION

This material is not regulated for transportation when it is shipped without mixture with other hazardous components. This classification is based on the evaluation of available information until full testing is completed or additional information is available to further classify hazards for transportation. Therefore, the use of PG I UN-specification packaging is recommended to ensure safe transportation of this material.

US DOT (Ground)
Proper Shipping Description:
Canadian TDG (Ground)
Proper Shipping Description:
ICAO (Air)
Proper Shipping Description:
IMDG (Water)
No data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

United States

Formaldehyde (50-00-0)				
Listed on the United States TSCA (Toxic Substance Control Act) inventory				
Listed on SARA Section 313 (Specific toxic chemical list RQ (Reportable quantity, section 304 of EPA's list of lists)	100 lb			
SARA Section 311/312 Hazard Class	Immediate (acute) health hazard Delayed (chronic) health hazard			
SARA Section 313-Emission Reporting	0.1%			
TPQ (Section 302)	500 lb			
OSHA	1000 Ib (TQ)			
Wood dust (CAS# NA)				
Listed on SARA Section 313 (Specific toxic chemical listing)				
SARA Section 311/312 Hazard Class	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard			
OSHA	Wood products are not hazardous under the criteria of the federal OSHA Hazard communication Standard 29 CFR 1910.1200. However wood dust generated by sawing, sanding or machining activities may be considered hazardous.			

United States - California

Office States - Camorna			
Formaldehyde (50-00-0)			
U.S. – California – Proposition 65 – Carcinogens List	Yes.		
No significance risk level (NSRL)	40 μg/day		
This product contains formaldehyde, which depending on temperature and humidity, may be omitted from the product. The user should determine whether formaldehyde emission resulting from its site specific use, handling, ventilation design and capacity for this products could exceed the safe harbor levels ($40 \mu g/day$).			
Wood dust (CAS# NA)			
U.S. – California – Proposition 65 – Carcinogens List	Yes.		
Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of			
California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. California Health and Safety Code Section 25249.6.			

Canada

Cumuu		
Formaldehyde (50-00-0		
Listed on the Canadian D	Listed on the Canadian DSL (Domestic Substances List) inventory	



Product ID#

WHMIS Classification	Class D Division 1 Subdivision A – Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A – Very toxic material	
	causing other toxic effects	
	Class E – Corrosive Material	
Wood dust (CAS# NA)		
Listed on the Canadian DSL (Domestic Substances List) inventory		
WHMIS Classification	Controlled Product: D2A – Wood dust: IARC Group 1	

SECTION 16: OTHER INFORMATION

Disclaimer This document has been prepared based on data considered to be

accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety

information. User is responsible to evaluate all available information when using product for any particular use and to comply with all

laws and regulations.

Preparation Date: September 8, 2015

Revision Date: N/A

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists

Carc - Carcinogenic

CAS - Chemical Abstract Service

CLP – The Classification, Labelling and Packaging Regulation

DOT - Department of Transportation

EPA = U.S. Environmental Protection Agency

Eye Irrit - Eye Irritation

GHS - Globally Harmonized System

HEPA - High Efficiency Particulate Arresting

HUD - The US Department of Housing and Urban Development

IARC - International Agency for Research on Cancer, IARC Group 1 or 2A

LD50 - Lethal Dose, 50% for oral and dermal

LC50 - Lethal Concentration, 50% for inhalation

NA – Not Available

NTP - National Toxicology Program

OSHA – Occupational Safety and Health Administration

PBT - Persistent Bioaccumulative Toxic

PEL – Permissible Exposure Limit

PG - Packing Group

PPE - Personal Protective Equipment

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Resp Sens – Respiratory Sensitization

SARA – Superfund Amendments and Reauthorization Act

Skin Irrit - Skin Irritation

Skin Sens – Skin Sensitization

STEL – Short-Term Exposure Limit (15 minutes)

STOT - Specific Target Organ Toxicity

TLV – Threshold Limit Value

TPQ – Threshold Planning Quantity

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

UN - United Nations

vPvB - Very Persistent and Very Bioaccumulative

WHMIS - (Canada) Workplace Hazardous Materials Information System